

vicinity of the scleral spur 50, seating in the sulcus of the capsule 36, 36a, and seating in the ciliary sulcus 38.

As shown in FIG. 2, lens structure 10 may be placed in posterior chamber 34 through pupil 41, which may be chemically dilated. Initially, lens structure 10 is slipped through an opening 42 of cornea 31 above the end of endothelial layer 32 which aligns with pupil 41. A pair of tweezers is employed to stabilize and to steer optical zone 12 and first element 13 through pupil 41 and to place first element 13 into seating engagement with the sulcus of capsule 36, 36a. Second element 17 is at this time also in the posterior chamber, having been passed through the pupil together with optical zone 12. Second element 17 is then passed through the opening, or iridectomy 43 in the iris, from the posterior side of the iris to the anterior side thereof and seated in the anterior chamber angle 33'. The engagement of element 17 with the iris, as well as the posterior capsule 36 prevent the lens from falling backward into the vitreous cavity 40. Curved portion 15 of first element 13 fits within the sulcus of the capsule 36, 36a at the periphery of the iris serving as a means for primary support of optical zone 12.

Second element 17 extends through the opening in the iris such that end portion 22 seats in the anterior chamber angle 33' to offer a positive means of secondary support for lens body 12 of lens structure 10.

FIG. 3 depicts another embodiment of the present invention wherein a resilient first position fixation element 13a has a first portion extending generally laterally from the lens body and a second portion extending from the end of the first portion generally transversely thereto and at least partly peripherally of the lens body to provide two points of support for the lens in the sulcus of the capsule 36. The remainder of the FIG. 3 lens structure is similar to the FIG. 1 structure.

From the foregoing description it will be apparent that a lens constructed in accordance with the invention has the advantage that its lens body may be readily positioned in the posterior chamber and yet have one of its position fixation elements seated in the anterior chamber angle where it can be seen both for implantation and for subsequent surgical removal, if necessary, thus facilitating both the implantation and any subsequent removal. Further, surgeons have nearly twenty years of experience with seating position fixation elements in the anterior chamber angle while they have only three or four years experience with seating position fixation elements in the posterior chamber. Thus seating one of the position fixation elements in the anterior chamber facilitates the surgical procedure but even more importantly provides a degree of confidence regarding the safety and efficiency of the procedure and of the resulting implant.

While there have been described what are at present considered to be the preferred embodiments of this invention, it will be obvious to those skilled in the art that various changes and modifications may be made therein without departing from the invention, and it is, therefore, aimed to cover all such changes and modifications as fall within the true spirit and scope of the invention.

What is claimed is:

1. An intraocular lens suitable for use as an artificial lens implant, the lens comprising:
  - a medial, light-focusing, lens body intended to be positioned adjacent the pupil on one side of the iris; and

at least a pair of position fixation elements connected with said lens body;

one of said position fixation elements having a first portion contiguous to and extending generally laterally outwardly from a first region of the periphery of said lens body and intended to extend to and seat adjacent the periphery of the iris on said one side thereof;

the other of said position fixation elements having a first portion extending generally laterally outwardly from a second region of the periphery of said lens body spaced from said first region and in a direction generally opposite that of said first portion of said one position fixation element, a second portion extending from said last-mentioned first portion and intended to extend through an opening in the iris from said one side of the iris to the other side of the iris and a third portion connected to said second portion and intended to extend to and seat adjacent the periphery of the iris on said other side thereof.

2. The intraocular lens as claimed in claim 1 wherein said first portion of said other of said pair of position fixation elements extends in generally radial direction from the second region of the periphery of said lens body.

3. The intraocular lens as claimed in claim 1 wherein said first and third portions of said other of said pair of position fixation elements extend in generally radial direction from said lens body and said second portion of said other position fixation element extends in generally axial direction with respect to said lens body.

4. The intraocular lens as claimed in claim 3 wherein said third portion of said other of said pair of position fixation elements has a seating portion adapted to seat in the eye adjacent the periphery of the iris on said other side thereof, said seating portion being located in a plane perpendicular to the optical axis of the lens body and being at the distal end of said second portion of said other position fixation element.

5. The intraocular lens as claimed in claim 4 wherein the length of said second portion of said other position fixation element is sufficient to permit movement of the iris between said seating portion of said other position fixation element and said lens body.

6. The intraocular lens as claimed in claim 4, wherein said first portion of said one position fixation element has a sealing portion adapted to seat adjacent the periphery of the iris on said one side thereof, and at least one of said seating portions has a pair of contact surfaces for providing together with said other seating portion at least three-point fixation for the lens.

7. An intraocular lens suitable for use as an artificial lens implant having an optical zone positioned posteriorly of the iris, the lens comprising:

a medial, light-focusing lens body intended to be positioned adjacent the pupil on the posterior side of the iris; and

at least a pair of position fixation elements connected with said lens body;

at least one of said pair of position fixation elements having a first portion contiguous to and extending generally laterally outwardly from a first region of the periphery of said lens body intended for seating in the sulcus of the posterior chamber capsule;

the other of said pair of position fixation elements having a first portion extending generally laterally outwardly from a second region of the periphery of